

### Abstract

Failures are localized through the use of a Tandem Connection along a segment of a transmission path (P) to be monitored, non-intrusive intermediate Tandem Connection monitors (M), and temporary Tandem Connection sources created along the path segment in the case of a failure (F) in order to forward information about the fault location at least in downstream direction but preferably also in upstream direction. In particular, a failure adjacent network element (N3) detects the failure and activates a temporary tandem connection source function (TS3d, TS3u). This function creates a valid tandem connection signal and insert therein a failed link identifier (TTI). The network element (N4) terminating the tandem connection generates an alarm report including the failed link as indicated by the failed link identifier.